## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

## LISTING OF CLAIMS

What is claimed is:

1. (Currently Amended) A method, comprising:

facilitating, by a computing device, specification of a plurality of models that model performance metrics for a plurality of marketing options based at least in part on a plurality of positions occupied by the marketing options in a selected one of on-line query answer sets and contextual advertisements; and

determining, by a computing device, a bidding strategy for the plurality of marketing options, allocating the bidding strategy directing allocation of monetary resources among the plurality of marketing options, by solving an objective function using the specified models.

- 2. (Previously Presented) The method according to claim 1, wherein the method further comprises facilitating a user, by the computing device, in creating the plurality of models.
- 3. (Original) The method according to claim 1, wherein the models comprise click models for the marketing options that forecast number of clicks for the marketing options for the various positions.
- 4. (Original) The method according to claim 1, wherein the models comprise revenue models for the marketing options that forecast revenues for the marketing options based on click conversions.
- 5. (Original) The method of claim 1, wherein the on-line query answer sets comprises on-line query answer sets of different search engines.
- 6. (Cancelled)
- 7. (Previously Presented) The method according to claim 1, wherein said solving comprises solving an object function selected from a group of objective functions including

a first objective function to maximize number of clicks for the marketing options, and

a second objective function to minimize average cost per click for the marketing options.

8. (Original) The method according to claim 7, wherein the group of objective functions further include at least one of

a third objective function to minimize the average cost per customer for the products or services of the marketing options,

a fourth objective function to maximize revenue for the products or services of the marketing options,

a fifth objective function to maximize profit for the products or services of the marketing options;

a sixth objective function to minimize marketing expenses for the marketing options; and

a seventh objective function to maximize a number of increases in customer sign-ups or registrations for products or services of the marketing options.

- 9. (Previously Presented) The method according to claim 1, wherein said solving comprises solving the objective function subject to one or more constraints.
- 10. (Original) The method according to claim 9, wherein the one or more constraints include a constraint requiring a traffic level for a URL for a period of time.
- 11. (Original) The method according to claim 9, wherein the one or more constraints include a constraint requiring a marketing option to be at a selected one of a particular online query answer set position, and a particular contextual advertisement position.
- 12. (Original) The method according to claim 9, wherein the one or more constraints include at least one of a constraint requiring a cost limit for average cost per customer, a constraint requiring a cost limit for the marketing options, and a constraint requiring a limit on an amount of revenue generated by products or services of the marketing options.
- 13. (Previously Presented) The method according to claim 1, wherein the method further comprises facilitating submission of a bidding for the plurality of marketing options, by the

computing device, for the positions for the plurality of marketing options based at least in part on the determined bidding strategy.

- 14. (Currently Amended) An article of manufacture comprising:
  - a computer readable storage medium; and
- a plurality of executable instructions stored therein, and designed to program a computing device to enable the computing device to:

facilitate specification of a plurality of models that model performance metrics for a plurality of marketing options based at least in part on a plurality of positions occupied by the marketing options in a selected one of on-line query answer sets and contextual advertisements, and

determine a bidding strategy for the plurality of marketing options, allocating the bidding strategy directing allocation of monetary resources among the plurality of marketing options, by solving an objective function using the plurality of models.

- 15. (Previously Presented) The article of manufacture according to claim 14, wherein the models comprise click models for the marketing options that forecast number of clicks for the marketing options for the various positions.
- 16. (Previously Presented) The article of manufacture according to claim 14, wherein the models comprise revenue models for the marketing options that forecast revenues for the marketing options based on click conversions.
- 17. (Previously Presented) The article of manufacture according to claim 14, wherein the on-line query answer sets comprise on-line query answer sets of different search engines.
- 18. (Previously Presented) The article of manufacture according to claim 14, wherein the instructions are designed to perform said determining by solving an objective function.
- 19. (Cancelled)
- 20. (Currently Amended) An apparatus, comprising:
- a storage medium having stored therein programming instructions designed to enable the apparatus to

facilitate specification of a plurality of models that model performance metrics for a plurality of marketing options based at least in part on a plurality of positions occupied by the marketing options in a selected one of on-line query answer sets and contextual advertisements, and

determine a bidding strategy for the plurality of marketing options, allocating the bidding strategy directing allocation of monetary resources among the marketing options, by solving an objective function, using the plurality of models; and

- at least one processor coupled to the apparatus to execute the instructions.
- 21. (Original) The apparatus according to claim 20, wherein the models comprise click models for the marketing options that forecast number of clicks for the marketing options for the various positions.
- 22. (Original) The apparatus according to claim 20, wherein the models comprise revenue models for the marketing options that forecast revenues for the marketing options based on click conversions.
- 23. (Original) The apparatus according to claim 20, wherein the on-line query answer sets comprise on-line query answer sets of different search engines.
- 24. (Cancelled)
- 25. (Previously Presented) The apparatus according to claim 20, wherein the instructions are further designed to enable the apparatus to bid for the positions for the plurality of marketing options based at least in part on the determined bidding strategy.
- 26. (Previously Presented) The article according to claim 14, wherein the instructions are further designed to enable the computing device to bid for the positions for the plurality of marketing options based at least in part on the determined bidding strategy.
- 27. (New) The method according to claim 1, further comprising creating by the computing device, at least one model out of the plurality of models by:

receiving by the computing device, empirical data for a plurality of performance metrics for a plurality of purchased marketing option; and

constructing the model, by the computing device, using the empirical data.